

**Commonwealth of Kentucky**  
**Natural Resources and Environmental Protection Cabinet**  
**Department for Environmental Protection**  
**Division for Air Quality**  
**803 Schenkel Lane**  
**Frankfort, Kentucky 40601**  
**(502) 573-3382**

**AIR QUALITY PERMIT**

**Permittee Name:** Grane Creek, LLC  
**Mailing Address:** 13880 Dulles Corner Lane, Herndon, VA 20171-4600

**Source Name:** Grane Creek, LLC – Henderson Generating Station  
**Mailing Address:** 13880 Dulles Corner Lane, Herndon, VA 20171-4600

**Source Location:** State Highway 2097, Henderson, Kentucky 42410

**Permit Type:** Federally-Enforceable  
**Review Type:** Synthetic Minor, Title V

**Permit Number:** V-00-023  
**Log Number:** G549  
**Application Complete date:** April 3, 2000

**AFS Plant ID#:** 21-101-00131  
**SIC Code:** 4911

**Region:** Evansville-Henderson  
**County:** Henderson

**Issuance Date:** August 17, 2000  
**Expiration Date:** August 17, 2005

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**John E. Hornback, Director**  
**Division for Air Quality**

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application which was determined to be complete on April 3, 2000, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This final permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any emission units without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

## **SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

### **Emissions Units: 01 - 06 (1e, 2e, 3e, 4e, 5e, and 6e) Six Natural Gas-Fired Simple Cycle Combustion Turbines**

#### **Description:**

981 mmBtu/hr maximum nominal rated heat input capacity, each, 85 MW nominal rated capacity output, each. Six (6) - General Electric (GE) Model PG7121 (EA) natural gas-fired simple cycle combustion turbines equipped with inlet cooling, dry low NO<sub>x</sub> combustors and catalytic oxidation.

Construction Commenced: August 2000

Construction Scheduled Completion: June 2003

#### **Applicable Regulations:**

Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, for emissions unit with a heat input at peak load equal to or greater than 10 mmBtu/hour for which construction commenced after October 3, 1977

Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart A, General Provision

#### **1. Operating Limitations:**

- a) The Permittee shall not operate any combustion turbine below 80 percent load, except during periods of startup, shutdown, and malfunction.
- b) Natural gas shall be the sole fuel fired in the turbines. [Self-imposed restriction which precludes Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality].

#### **2. Emission Limitations:**

- a) Pursuant to Regulations 40 CFR 60.332, and to preclude 401 KAR 51:017, nitrogen oxides emission level in the exhaust gas shall not exceed the short term limit of 9 ppm by volume at 15 percent oxygen and on a dry basis, and based on a (3) three-hour rolling average, except during periods of startup, shutdown, and malfunction. The ppm level of nitrogen oxides (at ISO standard conditions) shall be demonstrated by stack test, and measured with use of a continuous emission monitor (CEM) or while CEMs are not installed periodic monitoring in accordance with Condition 4(f) of this Section.
- b) Pursuant to Regulation 40 CFR 60.333, and to preclude 401 KAR 51:017, the fuel sulfur content due to the firing of pipeline quality natural gas shall not exceed 1.32 grain sulfur/100 SCF gas.

## **SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- c) To preclude Regulation 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, the carbon monoxide emission level in the exhaust gas shall not exceed 22.5 ppm by volume at 15 % oxygen, on a dry basis, during any (3) three-hour average period while firing natural gas, except during periods of startup, shutdown, and malfunction. Continuous compliance with this limit shall be demonstrated by a continuous emission monitor (CEM) or while CEMs are not installed periodic monitoring in accordance with Condition 4(g) of this Section.
- d) See Section D for source-wide emission limitations.

### **3. Testing Requirements:**

- a) Pursuant to Regulation 40 CFR 60.335 (b), in conducting performance tests required by 40 CFR 60.8, the owner or operator shall use as test methods and procedures the test methods in Appendix A of Part 60 or other methods or procedures as specified in 40 CFR 60.335, except as provided for in 40 CFR 60.8(b).
- b) Pursuant to Regulation 401 KAR 50:045, the owner or operator shall conduct an initial performance test for sulfur dioxide, nitrogen oxides, and carbon monoxide, with use of a reference test method approved by the Division.
- c) See General Conditions G (d)(5) and G (d)(6).

### **4. Specific Monitoring Requirements:**

- a) As per 40 CFR 75.12(d)(2), if a combustion turbine's operations exceed a capacity factor of 20 percent in any calendar year or exceed a capacity factor of 10.0 percent averaged over three years, the permittee shall install, certify, and operate all required CEMs on that unit by December 31 of the following calendar year.
- b) If natural gas fuel usage in the turbines exceeds 12,000 mmcf in any consecutive 12-month period, the permittee must have all required CEMs installed, certified, and operating on all six-combustion turbines no later than 6 months after the exceedance.
- c) The permittee shall install, certify, and operate all required CEMs as necessary to comply with any new additional applicable regulations.
- d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), each nitrogen oxides CEM that is installed shall be used as the indicator of continuous compliance with the nitrogen oxide emission limitation. Excluding the startups, shut downs, and malfunctions, if any 3-hour rolling average exceeds the nitrogen oxides emission limitation, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and complete necessary control device/process/CEM repairs or take corrective action as soon as practicable.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- e) The owner or operator shall comply with all of the monitoring requirements of 40 CFR 75.
- f) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), and 40 CFR 75, while CEMs are not installed, periodic monitoring for NO<sub>x</sub> must be conducted in accordance with 40 CFR 75, Appendix E. These requirements include initial performance testing at four different load points, correlating lb/mmBtu results to heat input rate, and retesting prior to the earlier of 3,000 unit operating hours or the 5-year renewal and anniversary of each unit's operating permit under 40 CFR 72.
- g) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), while CEMs are not installed, periodic monitoring for CO must be conducted. Initial performance testing shall correlate lb/mmBtu results to heat input rate, and retesting will occur prior to the 5-year renewal and anniversary of each unit's operating permit under 40 CFR 72. The permittee shall also continuously monitor the flue gas temperature at the inlet and outlet of the oxidation catalyst and within 15,000 unit operating hours, each catalyst shall be assessed through catalyst core samples and replaced as necessary.
- h) Pursuant to 401 KAR 50:035, Section 7(1)(c), the permittee shall monitor the fuel consumption of natural gas, in millions of cubic feet (mmcf), for each turbine on a daily basis.
- i) Pursuant to Regulation 40 CFR 60.334(b), the owner or operator of any stationary turbine shall monitor sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as specified in the following approved custom fuel-monitoring schedule.
  - i) The Permittee shall sample the natural gas for sulfur content two (2) times per year, with the samples at least two (2) months apart.
- j) The permittee shall install, calibrate, operate, test, and monitor all continuous monitoring systems and monitoring devices in accordance with 40 CFR 60.13 or 40 CFR 75.
- k) The Permittee shall monitor the hours of operation of each combustion turbine on a daily basis.
- l) The Permittee shall monitor the power output, in MW, of each combustion turbine on a daily basis.

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### **5. Specific Record Keeping Requirements:**

- a) Pursuant to Regulation 40 CFR 60.7 (f), the owner or operator of the gas turbines shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by Regulation 40 CFR 60, Subpart A, recorded in a permanent form suitable for inspection.
- b) Records, including those documenting the results of each compliance test and all other records and reports required by this permit, shall be maintained for five (5) years pursuant to Regulation 401 KAR 50:035.
- c) The permittee shall maintain a log of all sulfur content measurements as required in the approved custom fuel sulfur-monitoring plan (Condition 4(i)).
- d) The permittee shall maintain a daily log of the quantity of natural gas, in millions of cubic feet (mmcf), fired in each combustion turbine, for any consecutive (12) month period.
- e) The permittee shall maintain a daily log of all hours of operation for each combustion turbine, for any consecutive (12) month period.
- f) The permittee shall maintain a log of all power output, in MW, for each combustion turbine, for any consecutive twelve-(12) month period.

### **6. Specific Reporting Requirements:**

- a) Pursuant to Regulation 40 CFR 60.7(c), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:
  - 1) The magnitude of the excess emissions computed in accordance with the Regulation 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
  - 2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

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- 3) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
  - 4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- b) Pursuant to 40 CFR 60.334 (c), for the reports regarding nitrogen oxide excess emissions, in lieu of those based on the water to fuel ratio monitoring, periods of excess emissions are defined as follows:

Nitrogen oxides: any three-hour period during which the average nitrogen oxides emission level as determined by CEM or periodic monitoring, exceeds the applicable emission limitation.

- c) Pursuant to 401 KAR 50:035 Section 7(1)(c), monitoring requirement with CEM for nitrogen oxides, excess emissions are defined as any three (3) hour period during which the average emissions (arithmetic average) exceed the applicable nitrogen oxides emission limitation. These periods of excess emissions shall be reported quarterly.
- d) Pursuant to Regulation 40 CFR 60.334(c), excess emissions of sulfur dioxide are defined as any daily period (or as otherwise required in an approved custom fuel monitoring schedule) during which the sulfur content of the natural gas being fired in the gas turbine(s) exceeds the limitations set forth in Condition 2(b) above. These periods of excess emissions shall be reported quarterly.
- e) Pursuant to 401 KAR 50:035 Section 7(1)(c), monitoring requirement with CEM for carbon monoxide, excess emissions are defined as any three (3) hour period during which the average emissions (arithmetic average) exceed the applicable carbon monoxide emission standard. These periods of excess emissions shall be reported quarterly.

**7. Specific Control Equipment Operating Conditions:**

- a) The catalytic oxidizers shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b) See Section E for further requirements.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

### **Emissions Unit: 10 (10e and 11e) – Fuel Gas Heater**

#### **Description:**

One (1) natural gas fired – fuel gas heater rated at 14.77 mmBtu/hour

Construction commenced: August 2000

#### **Applicable Regulations:**

Regulation 401 KAR 50:035

Regulation 401 KAR 59:015, New indirect heat exchangers, applicable to an emission unit with a capacity of less than 250 mmBtu/hour which commenced on or after April 9, 1972.

Regulation 401 KAR 60:005, incorporating by reference Regulation 40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, for units less than or equal to 10 mmBtu/hour but greater than or equal to 10 mmBtu/hour commenced after June 9, 1989.

#### **1. Operating Limitations:**

The permittee shall limit the operation of the fuel gas heater so that the maximum annual natural gas fuel usage shall not exceed 49.8 mmcf per 12-month rolling average. [Self-imposed restriction to preclude 401 KAR 51:017, Prevention of significant deterioration of air quality].

#### **2. Emission Limitations:**

1. Pursuant to Regulation 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.511 lb/mmBtu based on a three-hour-average.
2. Pursuant to Regulation 401 KAR 59:015, Section 5(1)(c), the sulfur dioxide emissions shall not exceed 2.56 lb/mmBtu based on a twenty-four-hour average.
3. Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity based on a six minute average, shall be permissible for not more than 6 consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot.
4. While burning natural gas, this unit is considered to be in compliance with PM, SO<sub>2</sub> and opacity standard.
5. See Section D.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

### **3. Testing Requirements:**

The Permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division.

### **4. Specific Monitoring Requirements:**

The permittee shall monitor the daily fuel usage, the average daily fuel heat content, and the daily hours of operation.

### **5. Specific Recordkeeping Requirements:**

1. Pursuant to 40 CFR 60.7(b) and 60.48c, the permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of this unit.
2. The permittee shall maintain daily records of fuel combusted, average fuel heat content, and hours of operation of the natural gas heater. The permittee shall calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the beginning of each month. The record shall be maintained on site and made available for inspection by authorized personnel from the Division.
3. The permittee shall calculate and maintain records of such calculations to assure compliance with the emission limitations for the natural gas heater. The calculations shall be performed monthly with use of the monthly fuel usage, fuel heat content, hours of operation, and emission factors as specified in Table B-8 of the application for the natural gas heater.

### **6. Specific Reporting Requirements:**

See Section F

### **7. Specific Control Equipment Operating Conditions:**

None

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. (07) Emergency fire pump engine (300 hours per year operation)	NA
2. (08) 300 gallon fuel oil storage tank (for emergency fire pump engine)	NA
3. (09) natural gas-fired space heater (less than or equal to 0.5 mmBtu/hr)	NA

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. Nitrogen oxides, sulfur dioxide, and carbon monoxide emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
2. Compliance with any annual emissions, operating, or process limitations imposed pursuant to Regulation 401 KAR 50:035, Section 7(1)(a), and contained in this permit, shall be based on emissions and operation for any twelve- (12) consecutive months.
3. Gas Combustion Turbines (emission units 01, 02, 03, 04, 05, and 06):
  - a) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(a), and to preclude Regulation 401 KAR 51:017, emissions of nitrogen oxides from the combustion turbines, emission points 01 through 06, shall not exceed 245.3 tons per year, for all combustion turbines combined, during any consecutive twelve (12) month period. The permittee may assure compliance with this limitation by use of continuous emission monitoring (CEMs) for the combustion turbines, or while CEMs are not installed, by periodic monitoring conducted in accordance with 40 CFR 75, Appendix E.
  - b) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(a), and to preclude Regulation 401 KAR 51:017, emissions of carbon monoxide from the combustion turbines, emission points 01 through 06, shall not exceed 208.6 tons per year, for all combustion turbines combined, during any consecutive twelve (12) month period. The permittee may assure compliance with this limitation by use of continuous emission monitoring (CEMs) for the combustion turbines, or while CEMs are not installed, by periodic monitoring as described in Condition B4(g) of this permit .
  - c) The permittee shall track and maintain a monthly total and a twelve consecutive month summary of nitrogen oxides and carbon monoxide emissions to assure compliance with these limitations.
4. Fuel Gas Heaters (emission unit 10):
  - a) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(a), and to preclude Regulation 401 KAR 51:017, emissions of nitrogen oxides and carbon monoxide from the fuel gas heater, emission point 10, shall not exceed 3.2 tons per year and 1.4 tons per year, respectively for each pollutant, during any consecutive twelve (12) month period. The permittee may assure compliance with these limitations by calculations, with emission factors provided in Table B-8 of the application.

Equations for fuel gas heater based on table B-8:

(1) For nitrogen oxides:

$\text{lbs/hour} = \text{rated capacity in mmBtu/hour} \times 0.12 \text{ lb/mmBtu}$

$\text{Tons/month} = \text{lbs/hour nitrogen oxides} \times (\text{hours of operation/month}) / (2000\text{lb/Ton})$

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

(2) For carbon monoxide:

lbs/hour = rated capacity in mmBtu/hour x 0.056 lb/mmBtu.

Tons/month = lbs/hour carbon monoxide x (hours of operation/month)/2000lb/Ton)

- b) The permittee shall track and maintain a monthly total and a twelve consecutive month summary of nitrogen oxides and carbon monoxide emissions to assure compliance with this limitation.
- 5. Pursuant to Regulation 401 KAR 50:035, Section 7(1)(a), and to preclude Regulation 401 KAR 51:017, source-wide emissions of nitrogen oxides and carbon monoxide shall not equal or exceed 249 tons per year and 210.3 tons per year respectively, during any consecutive twelve (12) month period.
- 6. The permittee shall calculate and record the tons of nitrogen oxides and carbon monoxide emissions from the source on a monthly basis. Additionally, the permittee shall also calculate and record the tons of nitrogen oxides and carbon monoxide emissions emitted from the source during any consecutive twelve- (12) month period.
- 7. Compliance with the annual nitrogen oxides emission limitation and the carbon monoxide emission limitation may be determined by adding the emissions from the turbines and the other emission units for any twelve (12) consecutive months.
- 8. Records of tons of nitrogen oxides and carbon monoxide emissions emitted from the source in any consecutive twelve (12) month period shall be reported to the Kentucky Division for Air Quality's Owensboro Regional Office.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to Regulation 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any emissions unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## **SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS**

The following requirements become effective after commencement of operation:

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
  - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
  - b. Have access to and copy, at reasonable times, any records required by the permit:
    - i. During normal office hours, and
    - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
  - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
    - i. During all hours of operation at the source,
    - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
    - iii. During an emergency; and
  - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
    - i. During all hours of operation at the source,
    - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
    - iii. During an emergency.

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be reported to the division's Florence Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The reports are due within 30 days after the end of each six-month reporting period that commences on the initial issuance date of this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30<sup>th</sup> and July 30<sup>th</sup> of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

6. a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Owensboro Regional Office concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
- b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions to the Division for Air Quality's Owensboro Regional Office. Prompt reporting shall be defined as quarterly for any deviation related to emission standards (other than emission exceedances covered by condition 6(a) above) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality and the U.S. EPA in accordance with the following requirements:
- Identification of each term or condition of the permit that is the basis of the certification;
  - The compliance status regarding each term or condition of the permit;
  - Whether compliance was continuous or intermittent;
  - The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c), (d), and (e);
  - For an emissions unit that was still under construction or has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. Annual compliance certifications should be mailed to the following addresses:
- |   |  |
|---|--|
| Division for Air Quality<br>Owensboro Regional Office<br>3032 Alvey Park Drive W<br>Owensboro, KY 42003 | U.S. EPA Region IV<br>Air Enforcement Branch<br>Atlanta Federal Center<br>61 Forsyth St.<br>Atlanta, GA 30303-8960 |
| Division for Air Quality<br>Central Files<br>803 Schenkel Lane<br>Frankfort, KY 40601.                  |  |
8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission report is mailed to the permittee.
9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

**SECTION G - GENERAL CONDITIONS****(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d), and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act), and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. If any additional applicable requirements of the Acid Rain Program become applicable to the source.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.

**SECTION G - GENERAL CONDITIONS (CONTINUED)**

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [401 KAR 50:035, Permits, Section 7(3)(e)]
8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
11. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7 (3)(g)]
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]
15. Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emission units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.
16. Fugitive emissions shall be controlled in accordance with Regulation 401 KAR 63:010.
17. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions in accordance with Regulation 401 KAR 50:055, provided the permittee complies with the requirements of Regulation 401 KAR 50:055.

**SECTION G - GENERAL CONDITIONS (CONTINUED)****(b) Permit Expiration and Reapplication Requirements**

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 50:035, Permits, Section 12]

**(c) Permit Revisions**

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction, and within fifteen (15) days following start-up, and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Owensboro Regional Office in writing, with a copy to the division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the emission units listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.

**SECTION G - GENERAL CONDITIONS (CONTINUED)**

3. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 13(1), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or if construction is not completed within eighteen (18) months of the scheduled completion date (June 2003), then the construction and operating authority granted by this permit for those emission units for which construction was not completed shall immediately become invalid. Extensions of the time periods specified herein may be granted by the Division upon a satisfactory request showing that an extension is justified.
4. Operation of the emission units for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the emission units listed herein. However, within sixty (60) days after achieving the maximum production rate at which each emission unit will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (tests) at various loads on each emission unit for nitrogen oxides, sulfur dioxide (sulfur content test - see 40 CFR 60.333 and 60.335(d)), and carbon monoxide in accordance with Regulation 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Conditions G(d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance tests.
6. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) showing the proposed test conditions and number of tests, to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
2. The permittee shall comply with all requirements and conditions of the Title IV Acid Rain Permit (A-00-005, Attachment C) and the Phase II permit application (including the Phase II NO<sub>x</sub> compliance plan and averaging plan, if applicable) issued for this source. The permittee shall also comply with all requirements of any revised or future acid rain permit(s) issued for this source.

## **SECTION G - GENERAL CONDITIONS (CONTINUED)**

### **(f) Emergency Provisions**

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e), and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

### **(g) Risk Management Provisions**

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:
  - a. Submit a Risk Management Plan (RMP) and comply with the Risk Management Program. The permittee shall submit the RMP on diskette to:

RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA 22116-3346.
  - b. Submit additional relevant information if requested by the Division or the U.S. EPA.

## **SECTION G - GENERAL CONDITIONS (CONTINUED)**

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

## **SECTION H - ALTERNATE OPERATING SCENARIOS**

None

## **SECTION I - COMPLIANCE SCHEDULE**

None